



BHE GT&S, LLC
6603 West Broad Street
Richmond, VA 23230

February 15, 2021

BY ELECTRONIC DELIVERY
DEPAirQualityPermitting@wv.gov

Received
February 15, 2021
WV DEP/Div of Air Quality

Laura M. Crowder
Director, Division of Air Quality
WVDEP
601 57th Street, SE
Charleston, WV 25304

RE: Eastern Gas Transmission and Storage, Inc. – Title V Renewal Application
Camden Compressor Station – R30-04100010

Dear Ms. Crowder:

The renewal application for the Title V permit for Eastern Gas Transmission and Storage, Inc.'s¹ Camden Compressor Station is attached. In accordance with WVDEP instructions on your website, only this electronic submittal will be made unless otherwise instructed.

If you need any additional information, please contact Andy Gates at (804) 389-1340 or andy.gates@dominionenergy.com².

Sincerely,

Richard B. Gangle
Director Environmental Services

Attachment: Camden Station Title V Renewal Application Package

¹ As of November 1, 2020, Dominion Energy sold certain companies including Dominion Energy Transmission, Inc. to Berkshire Hathaway Energy Gas Transmission and Storage (BHE GT&S) Company. Dominion Energy Transmission, Inc. has changed its name to Eastern Gas Transmission and Storage, Inc.

² Please note that during a transition period, employees of the BHE GT&S unit will continue to utilize a Dominion Energy email address; however, BHE GT&S is not affiliated with Dominion Energy in any way. Any inferences with respect to the BHE GT&S use of a Dominion Energy email address should be disregarded, as the sender is no longer affiliated with Dominion Energy.

**CAMDEN COMPRESSOR STATION
EASTERN GAS TRANSMISSION AND STORAGE, INC.
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL
TITLE V OPERATING PERMIT NO: R30-04100010-2016**

Eastern Gas Transmission and Storage, Inc.
Camden Compressor Station
Route 2
Camden, WV 26338

FEBRUARY 2021

**EASTERN GAS TRANSMISSION AND STORAGE, INC.
CAMDEN COMPRESSOR STATION**

TITLE V PERMIT RENEWAL APPLICATION

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****Note:** There are no Attachments F or H for this permit application.

SECTION 1

Introduction

INTRODUCTION:

Camden Station is a natural gas compressor station used to compress natural gas for Eastern Gas Transmission and Storage, Inc.'s transmission pipeline system in West Virginia. Camden Station is located in Camden, WV.

Camden Station has the potential to emit in excess of 100 tons per year of nitrogen oxides (NO_x) and 100 tons per year of volatile organic compounds (VOCs). The station is classified as a major stationary source under the West Virginia Department of Environmental Protection (WVDEP) Regulation (45 CSR Part 30) and is subject to the Title V Operating Permit provisions of Part 30. Camden Station is also an area source of hazardous air pollutants (HAPs) since the potential to emit is less than 10 tons per year for individual HAPs and less than 25 tons per year of combined HAPs.

Camden Station was originally issued a Title V Operating Permit (Permit No: R30-04100010-2006) that has been subsequently renewed as required. Camden Station is also subject to the underlying State Operating Permit (Rule 13 Permit No: R13-2792) and General Permit (Permit No: G60-C014). The Title V operating permit is for the operation of five (5) 660 hp natural gas fired reciprocating engines (EN01 – EN05), one (1) glycol dehydrator system (DEHY01) with flare (F1), one (1) dehydration unit reboiler (RBR01), one (1) 475 hp emergency generator (EG01), and eight (8) above ground storage tanks of various sizes (TK01 – TK04 and TK06 - TK09).

The last Title V renewal application was submitted in 2015, with the Title V Operating Permit Renewal being issued on August 16, 2016, with an expiration date of August 16, 2021.

PROCESS DESCRIPTION

Camden Station is a compressor facility that services a natural gas pipeline system. The compressor engines (EN01 – EN05) at the facility receive natural gas flowing through a valve on the pipeline and recompresses that natural gas in order to further transport the natural gas through the pipeline system. Prior to exiting the facility through the pipeline, the compressed natural gas is processed by the dehydration unit (DEHY01). The dehydration unit removes moisture and impurities from the gas stream. Emergency backup power is supplied by emergency generator (EG01).

The dehydration process begins with the compressed natural gas entering the unit and then being passed through a triethylene glycol dehydration system consisting of a contactor bed, a reboiler (RBR01), and associated equipment. As a result of this process, the natural gas is stripped of moisture and impurities, along with a small amount of hydrocarbons. The wet gas enters the contactor where moisture and some hydrocarbons are absorbed into the lean glycol. The glycol, which has become rich with absorbed moisture and hydrocarbons, is regenerated in the still column (DEHY01) using the heat generated from the natural gas-fired reboiler (RBR01) to liberate the moisture and hydrocarbon vapors. The regenerator vapors are vented to the flare (F1) to combust the hydrocarbons; thereby, reducing overall emissions and odor. The flare is permitted with a destruction efficiency of 95%. The compressed, dehydrated gas then enters the pipeline.

Listed below is a description of the equipment located at the Camden Station:

Five (5) 660 hp Cooper GMXE-8 natural gas-fired reciprocating engines/integral compressors

- Emission unit ID: EN01, EN02, EN03, EN04, and EN05
- Emission point ID: EN01, EN02, EN03, EN04, and EN05

One (1) 475 hp Cummins GTA 19 GS2 emergency generator

- Emission unit ID: EG01
- Emission point ID: EG01

One (1) 1.0 MMBtu/hr NATCO natural gas-fired dehydration unit reboiler

- Emission unit ID: RBR01
- Emission point ID: RBR01

One (1) 27.6 MMscf/day dehydration unit/still column

- Emission unit ID: DEHY01
- Emission point ID: DEHY01

One (1) 10 MMBtu/hr dehydration unit controlled flare

- Emission unit ID: F1
- Emission point ID: F1

One (1) 2,730-gallon vertical aboveground triethylene glycol storage tank

- Emission unit ID: TK01
- Emission point ID: TK01

One (1) 2,730-gallon vertical aboveground used oil storage tank

- Emission unit ID: TK02
- Emission point ID: TK02

One (1) 4,200-gallon vertical aboveground ethylene glycol storage tank

- Emission unit ID: TK03
- Emission point ID: TK03

One (1) 2,100-gallon vertical aboveground ethylene glycol storage tank

- Emission unit ID: TK04
- Emission point ID: TK04

One (1) 2,730-gallon vertical aboveground wastewater storage tank

- Emission unit ID: TK06
- Emission point ID: TK06

One (1) 7,000-gallon horizontal aboveground lube oil storage tank

- Emission unit ID: TK07
- Emission point ID: TK07

One (1) 8,000-gallon horizontal aboveground process fluids storage tank

- Emission unit ID: TK08
- Emission point ID: TK08

One (1) 550-gallon horizontal aboveground wastewater storage tank

- Emission unit ID: TK09
- Emission point ID: TK09

SECTION 2

Title V Renewal Permit Application -
General Forms



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL
PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475

www.dep.wv.gov/daq

Received
February 15, 2021
WV DEP/Div of Air Quality

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. Name of Applicant (As registered with the WV Secretary of State's Office): Eastern Gas Transmission and Storage, Inc. (formerly Dominion Energy Transmission, Inc.)	2. Facility Name or Location: Camden Station
3. DAQ Plant ID No.: 0 4 1 — 0 0 0 1 0	4. Federal Employer ID No. (FEIN): 5 5 0 6 2 9 2 0 3
5. Permit Application Type: <input type="checkbox"/> Initial Permit <input checked="" type="checkbox"/> Permit Renewal <input type="checkbox"/> Update to Initial/Renewal Permit Application When did operations commence? 1972 What is the expiration date of the existing permit? 08/16/2021	
6. Type of Business Entity: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Governmental Agency <input type="checkbox"/> Limited Partnership <input type="checkbox"/> LLC	7. Is the Applicant the: <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Both If the Applicant is not both the owner and operator, please provide the name and address of the other party. _____ _____ _____
8. Number of onsite employees: Normally unmanned	
9. Governmental Code: <input checked="" type="checkbox"/> Privately owned and operated; 0 <input type="checkbox"/> Federally owned and operated; 1 <input type="checkbox"/> State government owned and operated; 2 <input type="checkbox"/> County government owned and operated; 3 <input type="checkbox"/> Municipality government owned and operated; 4 <input type="checkbox"/> District government owned and operated; 5	
10. Business Confidentiality Claims Does this application include confidential information (per 45CSR31)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY" guidance.	

11. Mailing Address		
Street or P.O. Box: 925 White Oaks Blvd.		
City: Bridgeport	State: WV	Zip: 26330
Telephone Number: (681) 842-3000	Fax Number: (681) 842-3323	

12. Facility Location		
Street: Route 2	City: Camden	County: Lewis
UTM Easting: 534.84 km	UTM Northing: 4,323.27 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions: From Interstate 79 North, take the Weston exit. Turn left on Route 33 West through Weston. Turn left onto Smith Run Road and travel 1.5 miles. Turn left onto gravel road and proceed 0.3 miles to station on the left.		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, for what air pollutants?
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If yes, name the affected state(s). Pennsylvania Ohio
Is facility located within 100 km of a Class I Area¹? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, do emissions impact a Class I Area¹? <input type="checkbox"/> Yes <input type="checkbox"/> No		If yes, name the area(s). Dolly Sods Wilderness Area Otter Creek Wilderness Area
¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

13. Contact Information		
Responsible Official: John M. Lamb		Title: Vice President, Pipeline Operations
Street or P.O. Box: 925 White Oaks Blvd.		
City: Bridgeport	State: WV	Zip: 26330
Telephone Number: (681) 842-3000	Fax Number: (681) 842-3323	
E-mail address: john.m.lamb@dominionenergy.com		
Environmental Contact: Andy Gates		Title: Environmental Consultant
Street or P.O. Box: 6603 W. Broad St.		
City: Richmond	State: VA	Zip: 23230
Telephone Number: (804) 389-1340	Fax Number: NA	
E-mail address: andy.gates@dominionenergy.com		
Application Preparer: Andy Gates		Title: Environmental Consultant
Company: Eastern Gas Transmission and Storage, Inc.		
Street or P.O. Box: 6603 W. Broad St.		
City: Richmond	State: VA	Zip: 23230
Telephone Number: (804) 389-1340	Fax Number: NA	
E-mail address: andy.gates@dominionenergy.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Natural Gas Compressor Station	N/A	486120	4922

Provide a general description of operations.

Camden Station is a compressor facility that services a natural gas pipeline system. The compressor engines (EN01 – EN05) at the facility receive natural gas flowing through a valve on the pipeline and recompresses the natural gas in order to further transport the natural gas through the pipeline system. Prior to exiting the facility through the pipeline, the compressed natural gas is processed by the dehydration unit (DEHY01). The dehydration unit removes moisture and impurities from the gas stream.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to “Plot Plan - Guidelines.”

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
<input checked="" type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR34)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input checked="" type="checkbox"/> Section 111 NSPS	<input checked="" type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input checked="" type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> CAIR NO _x Annual Trading Program (45CSR39)	<input type="checkbox"/> CAIR NO _x Ozone Season Trading Program (45CSR40)
<input type="checkbox"/> CAIR SO ₂ Trading Program (45CSR41)	

19. Non Applicability Determinations
<p>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</p> <p>40 CFR Subpart JJJJ – The compressor engines (EN01 – EN05) are not subject to this subpart since they were installed in 1962 and 1964, before the applicability date.</p> <p>40 CFR 60 Subpart OOOO – This subpart does not apply to the facility since the facility is a gathering facility that does not have tanks, gas wells, centrifugal compressors, reciprocating compressors, and/or pneumatic controllers constructed, modified, or reconstructed after August 23, 2011.</p> <p>40 CFR 60, Subpart OOOOa –This facility has no equipment with applicable requirements under Subpart OOOOa. This subpart applies to equipment installed after September 18, 2015. The facility has no affected emissions units that have been installed after the applicable Subpart OOOOa effective date.</p> <p>40 CFR 63 Subpart HHH – This subpart does not apply to the facility since the facility is not a transmission or storage station and is not a major source of HAPs.</p> <p>40 CFR 63 Subpart DDDDD – The reboiler (RBR01) is not subject to this subpart since it is exempt by §63.7491(h) and facility is not major source of HAPs.</p> <p>40 CFR 63 Subpart JJJJJ – The reboiler (RBR01) is not applicable to this subpart since it is considered a “process heater,” which is excluded from the definition of “boiler”.</p>
<input checked="" type="checkbox"/> Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

45 CSR 6-3.1 – Open burning prohibited (TV 3.1.1)
45 CSR 6-3.2 – Open burning exemption (TV 3.1.2)
40 CFR Part 61 and 45 CSR 34 – Asbestos inspection and removal (TV 3.1.3)
State Only: 45 CSR 4-3.1 – No objectionable odors (TV 3.1.4)
45 CSR 11-5.2 – Standby plans for emergency episodes (TV 3.1.5)
WV Code 22-5-4 (a) (14) – Annual emission inventory reporting (TV 3.1.6)
40 CFR Part 82 Subpart F – Ozone depleting substances (TV 3.1.7)
40 CFR Part 68 – Risk Management Plan (TV 3.1.8)
State Only: 45 CSR 17-3.1 – Fugitive particulate matter (TV 3.1.9)
45 CSR 13 – Minor source of HAP (TV 3.1.10; R13-2792 4.1.2)

☒ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 6-3.1 – The permittee shall prohibit open burning (TV 3.1.1)
45 CSR 6-3.2 – The permittee shall notify if open burning occurs (TV 3.1.2)
40 CFR Part 61 and 45 CSR 34 – Prior to demolition/construction buildings will be inspected for asbestos (TV 3.1.3)
45 CSR 4 – Permittee shall maintain records of all odor complaints received (TV 3.1.4)
45 CSR 11 – Upon request by the Secretary, the permittee shall prepare a standby plan (TV 3.1.5)
WV 22-5-4 – The permittee shall submit annual emission inventory reports (TV 3.1.6)
40 CFR Part 82 Subpart F – The permittee will prohibit maintenance, service, or repair of appliances containing Ozone depleting substances (TV 3.1.7)
40 CFR Part 68 – Should the permittee become subject to 40 CFR Part 68, a RMP shall be submitted (TV 3.1.8)
45 CSR 17 – The permittee will limit fugitive emissions from the facility by burning only pipeline quality natural gas (TV 3.1.9)
45 CSR 13 – The permittee shall maintain minor source of HAP status (TV 3.1.10; R13-2792 4.1.2)
45 CSR 13 and WV Code 22-5-4 (a) (15) – Testing requirements (TV 3.3.1)
45 CSR 30 – Recordkeeping Requirements (TV 3.4)
45 CSR 30 – Reporting Requirements (TV 3.5)
45 CSR 30 – The permittee shall submit a certified emissions statement and pay fees annually (TV 3.5.4)
45 CSR 30 – The permittee shall submit semi-annual monitoring reports (TV 3.5.6)

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit <i>(if any)</i>
R13-2792	03/04/2009	N/A
G60-C014	12/04/2009	N/A

22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
N/A		

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	98.09
Nitrogen Oxides (NO _x)	647.08
Lead (Pb)	N/A
Particulate Matter (PM _{2.5}) ¹	4.56
Particulate Matter (PM ₁₀) ¹	4.56
Total Particulate Matter (TSP)	5.77
Sulfur Dioxide (SO ₂)	0.07
Volatile Organic Compounds (VOC)	212.65
Hazardous Air Pollutants ²	Potential Emissions
Acetaldehyde	0.92
Acrolein	0.92
Benzene	0.75
Ethylbenzene	0.32
Formaldehyde	6.55
Hexane	0.39
Toluene	1.02
Xylene	1.59
Regulated Pollutants other than Criteria and HAP	Potential Emissions

¹PM_{2.5} and PM₁₀ are components of TSP.

²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Potentials-to-emit are based on currently operating equipment and permit limits as applicable and include fugitive VOC (including blowdowns).

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	<p>19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO₂, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	<p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
<input type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input type="checkbox"/>	51. Steam cleaning operations.
<input type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the Title V Equipment Table and provide it as ATTACHMENT D .
26. Emission Units
For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E .
For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F .
27. Control Devices
For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H .

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: John M. Lamb

Title: Vice President, Pipeline Operations

Responsible official's signature:

Signature: _____

(Must be signed and dated in blue ink)

Signature Date: 2/11/2021

Note: Please check all applicable attachments included with this permit application:

☒ ATTACHMENT A: Area Map

☒ ATTACHMENT B: Plot Plan(s)

☒ ATTACHMENT C: Process Flow Diagram(s)

☒ ATTACHMENT D: Equipment Table

☒ ATTACHMENT E: Emission Unit Form(s)

☐ ATTACHMENT F: Schedule of Compliance Form(s)

☒ ATTACHMENT G: Air Pollution Control Device Form(s)

☐ ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

Received
February 15, 2021
WV DEP/Div of Air Quality

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

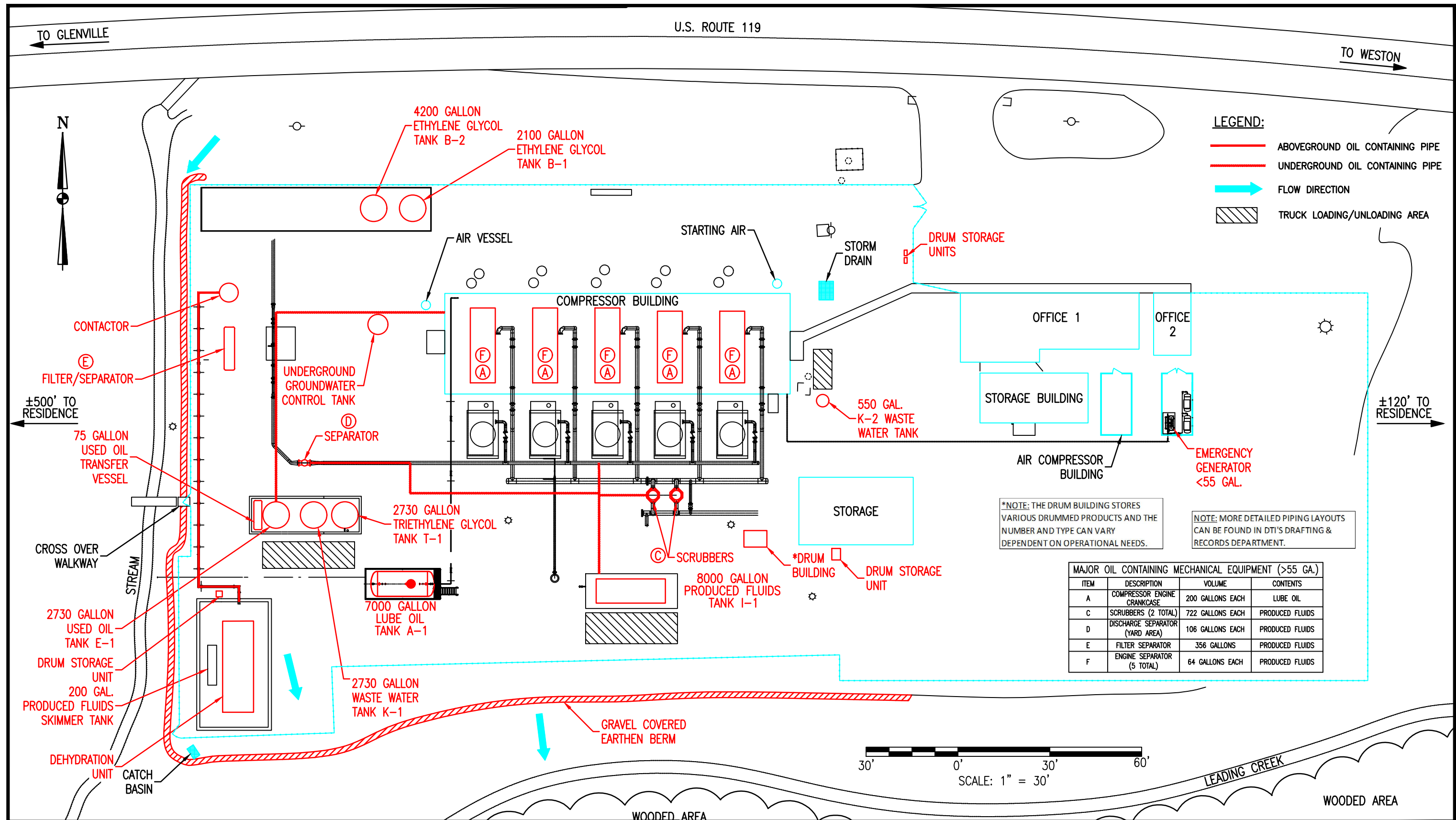
Attachment A

Area Map



Attachment B

Plot Plan



ITEM	DESCRIPTION	VOLUME	CONTENTS
A	COMPRESSOR ENGINE CRANKCASE	200 GALLONS EACH	LUBE OIL
C	SCRUBBERS (2 TOTAL)	722 GALLONS EACH	PRODUCED FLUIDS
D	DISCHARGE SEPARATOR (YARD AREA)	106 GALLONS EACH	PRODUCED FLUIDS
E	FILTER SEPARATOR	356 GALLONS	PRODUCED FLUIDS
F	ENGINE SEPARATOR (5 TOTAL)	64 GALLONS EACH	PRODUCED FLUIDS

SYM.	DATE	BY	REVISION DESCRIPTION	PRJ/TSK	APP.	SCALE	DATE	Dominion Energy Transmission, Inc. 925 White Oaks Blvd., Bridgeport, WV 26330 (681) 842-3000			
11	10/16/2019	MRM	UPDATED PER RACHEL CALVERT MARK-UPS			1" = 30'		FOR: CAMDEN COMPRESSOR STATION			
10	11/01/2018	TBB	UPDATED PER RACHEL CALVERT MARK-UPS					TITLE: ENVIRONMENTAL EMERGENCY SITE PLAN			
9	05/18/2018	JAL	ADDED 500 GALLON K-2 WASTE WATER TANK					DIR: DOCUMENTUM	GROUP	DWG. NO.	REV.
8	02/14/2018	JAL	RELOCATED SPILL KITS, ADDED SKIMMER TANK BESIDE DEHY UNIT					FILE: PRJ/TSK:	PD	X4154K	11
7	09/29/2016	JAR	UPDATED TANK B-1 & B-2 CAPACITIES PER JOSEPH GIOMPALO MARK UPS					TOWN: FREEMANS CREEK, WV	COUNTY: LEWIS		

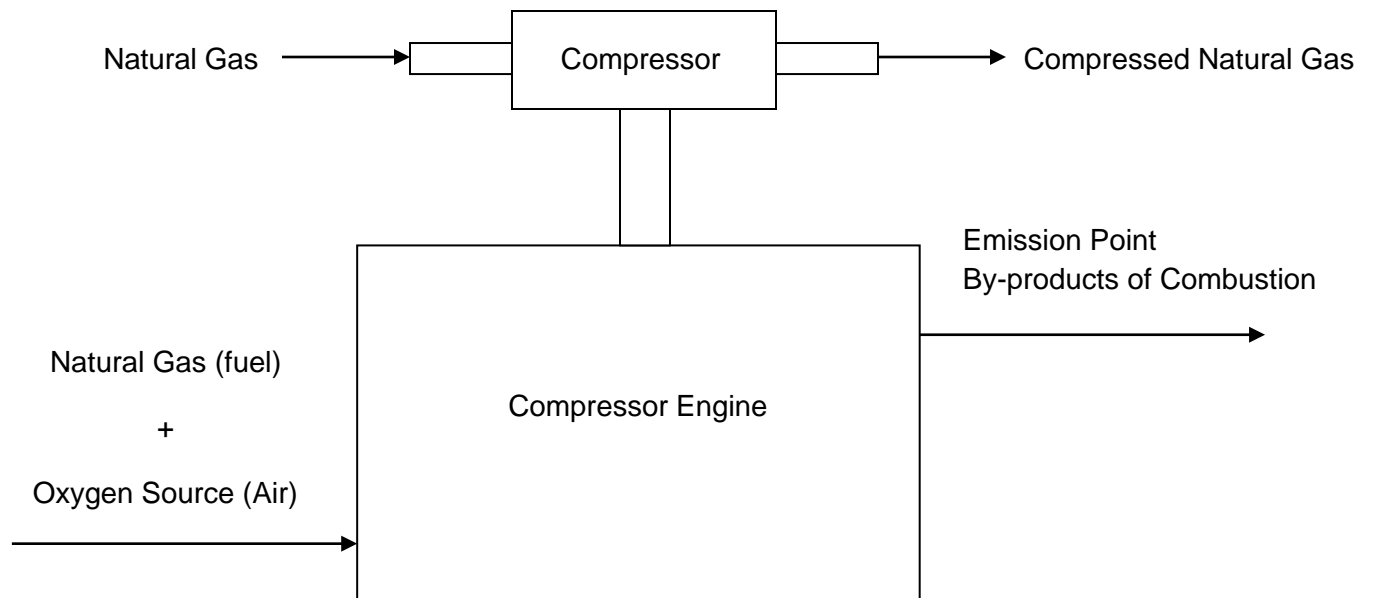
Attachment C

Process Flow Diagrams

Eastern Gas Transmission and Storage, Inc.

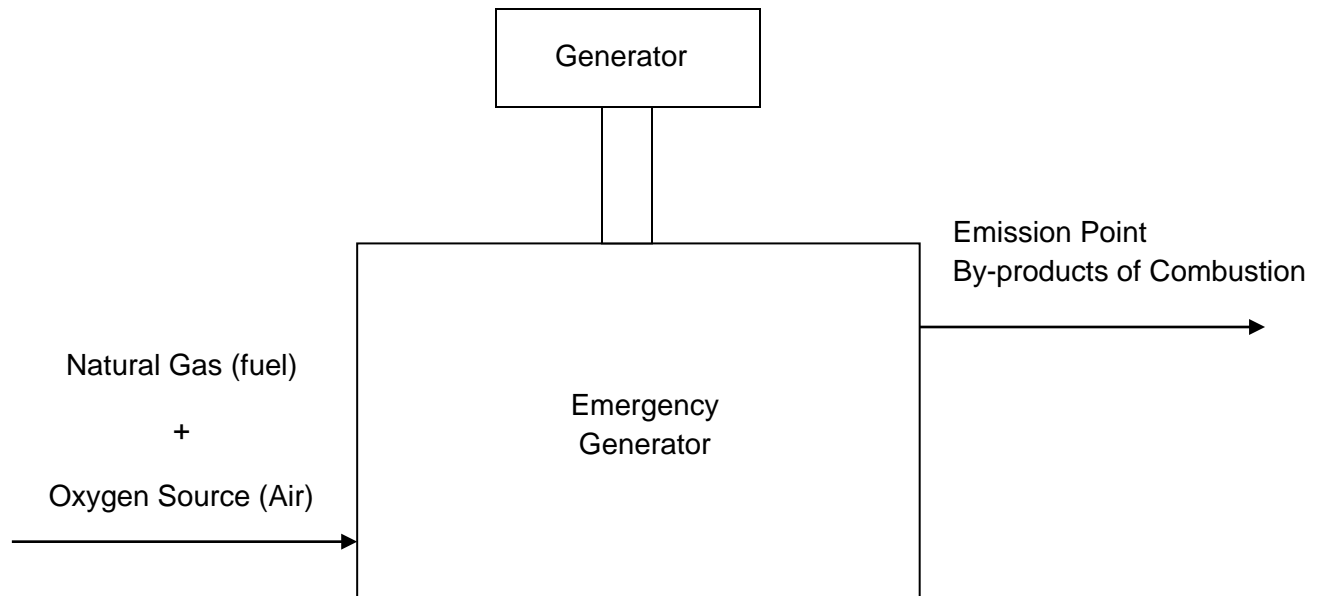
Camden Compressor Station

Compressor Engines (EN01 – EN05) Process Flow Diagram



Eastern Gas Transmission and Storage, Inc.
Camden Compressor Station

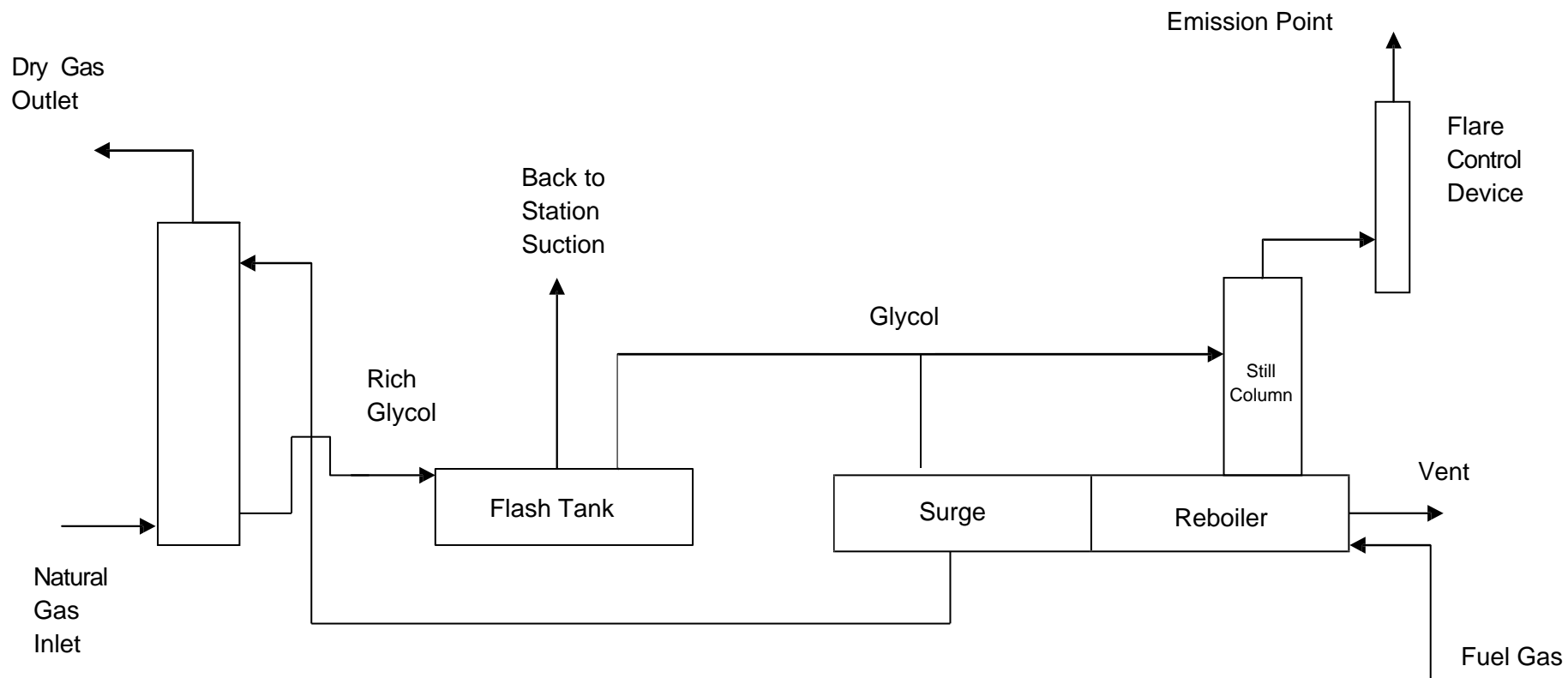
Emergency Generator (EG01) Process Flow Diagram



Eastern Gas Transmission and Storage, Inc.

Camden Compressor Station

Dehydration Unit (F1, DEHY01, and RBR01) Process Flow Diagram



Attachment D

Title V Equipment Table

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Point ID ¹	Control Device ¹	Emission Unit ID ¹	Emission Unit Description	Design Capacity	Year Installed/Modified
EN01	N/A	EN01	Reciprocating Engine/Integral Compressor; Cooper GMXE-8; 2SLB SI engine	660 hp	1962
EN02	N/A	EN02	Reciprocating Engine/Integral Compressor; Cooper GMXE-8; 2SLB SI engine	660 hp	1962
EN03	N/A	EN03	Reciprocating Engine/Integral Compressor; Cooper GMXE-8; 2SLB SI engine	660 hp	1964
EN04	N/A	EN04	Reciprocating Engine/Integral Compressor; Cooper GMXE-8; 2SLB SI engine	660 hp	1964
EN05	N/A	EN05	Reciprocating Engine/Integral Compressor; Cooper GMXE-8; 2SLB SI engine	660 hp	1964
RBR01	F1	RBR01	Glycol Dehydration Unit Reboiler	1.0 MMBtu/hr	2009
DEHY01	F1	DEHY01	Glycol Dehydration Unit Still Column	27.6 MMscf/day	2009
F1	N/A	F1	Glycol Dehydration Unit Flare	10 MMBtu/hr	2009
EG01	1C	EG01	Emergency Generator – Cummins GTA 19 G2	475 hp	2009
TK01	N/A	TK01	Vertical Aboveground Storage Tank – Triethylene Glycol	2,730 gallon	1991
TK02	N/A	TK02	Vertical Aboveground Storage Tank – Used Oil	2,730 gallon	1991
TK03	N/A	TK03	Vertical Aboveground Storage Tank – Ethylene Glycol	4,200 gallon	1991
TK04	N/A	TK04	Vertical Aboveground Storage Tank – Ethylene Glycol	2,100 gallon	1962
TK06	N/A	TK06	Vertical Aboveground Storage Tank –Wastewater	2,730 gallon	1962
TK07	N/A	TK07	Horizontal Aboveground Storage Tank –Lube Oil	7,000 gallon	2003
TK08	N/A	TK08	Horizontal Aboveground Storage Tank – Produced Fluids	8,000 gallon	2011
New units (updates) to equipment list:					
TK09	N/A	TK09	Aboveground Storage Tank K2 – Wastewater	550 gallon	2018

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

Attachment E

Emission Unit Forms

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: EN01	Emission unit name: EN01 Reciprocating Engine/Integral Compressor	List any control devices associated with this emission unit: N/A
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired reciprocating engine/integral compressor

Manufacturer: Cooper	Model number: GMXE-8	Serial number: 45641
--------------------------------	--------------------------------	--------------------------------

Construction date:	Installation date: 1962	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

660 hp

Maximum Hourly Throughput: 0.0054 MMscf/hr	Maximum Annual Throughput: 47.3 MMscf/yr	Maximum Operating Schedule: 8,760 hrs/yr
--	--	--

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 660 hp	Type and Btu/hr rating of burners: 8,200 Btu/hp-hr 0.0054 MMscf/hr
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline quality natural gas
 - Maximum hourly fuel usage = 0.0054 MMscf/hr
 - Maximum annual fuel usage = 47.3 MMscf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.37	19.12
Nitrogen Oxides (NO _x)	29.49	129.18
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	0.21	0.91
Particulate Matter (PM ₁₀)	0.21	0.91
Total Particulate Matter (TSP)	0.26	1.14
Sulfur Dioxide (SO ₂)	< 0.01	0.014
Volatile Organic Compounds (VOC)	3.30	14.47
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.042	0.184
Acrolein	0.042	0.184
Benzene	0.01	0.05
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.30	1.31
Hexane	< 0.01	0.011
Toluene	0.01	0.023
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). <ul style="list-style-type: none"> - CO, NO_x, and VOC emission rates based on emission statement submittals to WVDEP. - PM₁₀, PM_{2.5}, SO₂, and HAP emission factors from AP-42 Section 3.2, Table 3.2-1. 		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 7.1.1 and 7.1.3)
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.2 and 7.1.4)
40 CFR Part 63 Subpart ZZZZ – NESHAP monitoring requirements (TV 7.2.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP recordkeeping requirements (TV 7.4.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP reporting requirements (TV 7.5)

 X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first (TV 7.1.1)
40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 7.1.4)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 7.1.3 and 7.1.5)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring, recordkeeping, and reporting requirements (TV 7.2.1, 7.4.1, and 7.5)

Are you in compliance with all applicable requirements for this emission unit? X Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: EN02	Emission unit name: EN02 Reciprocating Engine/Integral Compressor	List any control devices associated with this emission unit: N/A
---	--	--

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired reciprocating engine/integral compressor

Manufacturer: Cooper	Model number: GMXE-8	Serial number: 45642
--------------------------------	--------------------------------	--------------------------------

Construction date:	Installation date: 1962	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

660 hp

Maximum Hourly Throughput: 0.0054 MMscf/hr	Maximum Annual Throughput: 47.3 MMscf/yr	Maximum Operating Schedule: 8,760 hrs/yr
--	--	--

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 660 hp	Type and Btu/hr rating of burners: 8,200 Btu/hp-hr 0.0054 MMscf/hr
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline quality natural gas
 - Maximum hourly fuel usage = 0.0054 MMscf/hr
 - Maximum annual fuel usage = 47.3 MMscf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.37	19.12
Nitrogen Oxides (NO _x)	29.49	129.18
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	< 0.01	< 0.01
Particulate Matter (PM ₁₀)	0.05	0.24
Total Particulate Matter (TSP)	0.11	0.47
Sulfur Dioxide (SO ₂)	< 0.01	0.014
Volatile Organic Compounds (VOC)	3.30	14.47
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.042	0.184
Acrolein	0.042	0.184
Benzene	0.11	0.46
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.30	1.31
Hexane	< 0.01	0.011
Toluene	0.01	0.023
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). <ul style="list-style-type: none"> - CO, NO_x, and VOC emission rates based on emission statement submittals to WVDEP. - PM₁₀, PM_{2.5}, SO₂, and HAP emission factors from AP-42 Section 3.2, Table 3.2-1. 		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 7.1.1 and 7.1.3)
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.2 and 7.1.4)
40 CFR Part 63 Subpart ZZZZ – NESHAP monitoring requirements (TV 7.2.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP recordkeeping requirements (TV 7.4.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP reporting requirements (TV 7.5)

 X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first (TV 7.1.1)
40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 7.1.4)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 7.1.3 and 7.1.5)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring, recordkeeping, and reporting requirements (TV 7.2.1, 7.4.1, and 7.5)

Are you in compliance with all applicable requirements for this emission unit? X Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: EN03	Emission unit name: EN03 Reciprocating Engine/Integral Compressor	List any control devices associated with this emission unit: N/A
---	--	--

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired reciprocating engine/integral compressor

Manufacturer: Cooper	Model number: GMXE-8	Serial number: 45997
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Construction date:	Installation date: 1964	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

660 hp

Maximum Hourly Throughput: 0.0054 MMscf/hr	Maximum Annual Throughput: 47.3 MMscf/yr	Maximum Operating Schedule: 8,760 hrs/yr
--	--	--

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 660 hp	Type and Btu/hr rating of burners: 8,200 Btu/hp-hr 0.0054 MMscf/hr
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline quality natural gas
 - Maximum hourly fuel usage = 0.0054 MMscf/hr
 - Maximum annual fuel usage = 47.3 MMscf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.37	19.12
Nitrogen Oxides (NO _x)	29.49	129.18
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	< 0.01	< 0.01
Particulate Matter (PM ₁₀)	0.05	0.24
Total Particulate Matter (TSP)	0.11	0.47
Sulfur Dioxide (SO ₂)	< 0.01	0.014
Volatile Organic Compounds (VOC)	3.30	14.47
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.042	0.184
Acrolein	0.042	0.184
Benzene	0.11	0.46
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.30	1.31
Hexane	< 0.01	0.011
Toluene	0.01	0.023
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). <ul style="list-style-type: none"> - CO, NO_x, and VOC emission rates based on emission statement submittals to WVDEP. - PM₁₀, PM_{2.5}, SO₂, and HAP emission factors from AP-42 Section 3.2, Table 3.2-1. 		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 7.1.1 and 7.1.3)
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.2 and 7.1.4)
40 CFR Part 63 Subpart ZZZZ – NESHAP monitoring requirements (TV 7.2.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP recordkeeping requirements (TV 7.4.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP reporting requirements (TV 7.5)

 X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first (TV 7.1.1)
40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 7.1.4)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 7.1.3 and 7.1.5)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring, recordkeeping, and reporting requirements (TV 7.2.1, 7.4.1, and 7.5)

Are you in compliance with all applicable requirements for this emission unit? X Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: EN04	Emission unit name: EN04 Reciprocating Engine/Integral Compressor	List any control devices associated with this emission unit: N/A
---	--	--

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired reciprocating engine/integral compressor

Manufacturer: Cooper	Model number: GMXE-8	Serial number: 45999
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Construction date:	Installation date: 1964	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
660 hp

Maximum Hourly Throughput: 0.0054 MMscf/hr	Maximum Annual Throughput: 47.3 MMscf/yr	Maximum Operating Schedule: 8,760 hrs/yr
--	--	--

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 660 hp	Type and Btu/hr rating of burners: 8,200 Btu/hp-hr 0.0054 MMscf/hr
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline quality natural gas
 - Maximum hourly fuel usage = 0.0054 MMscf/hr
 - Maximum annual fuel usage = 47.3 MMscf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.37	19.12
Nitrogen Oxides (NO _x)	29.49	129.18
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	< 0.01	< 0.01
Particulate Matter (PM ₁₀)	0.05	0.24
Total Particulate Matter (TSP)	0.11	0.47
Sulfur Dioxide (SO ₂)	< 0.01	0.014
Volatile Organic Compounds (VOC)	3.30	14.47
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.042	0.184
Acrolein	0.042	0.184
Benzene	0.11	0.46
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.30	1.31
Hexane	< 0.01	0.011
Toluene	0.01	0.023
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). <ul style="list-style-type: none"> - CO, NO_x, and VOC emission rates based on emission statement submittals to WVDEP. - PM₁₀, PM_{2.5}, SO₂, and HAP emission factors from AP-42 Section 3.2, Table 3.2-1. 		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 7.1.1 and 7.1.3)
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.2 and 7.1.4)
40 CFR Part 63 Subpart ZZZZ – NESHAP monitoring requirements (TV 7.2.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP recordkeeping requirements (TV 7.4.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP reporting requirements (TV 7.5)

 X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first (TV 7.1.1)
40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 7.1.4)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 7.1.3 and 7.1.5)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring, recordkeeping, and reporting requirements (TV 7.2.1, 7.4.1, and 7.5)

Are you in compliance with all applicable requirements for this emission unit? X Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: EN05	Emission unit name: EN05 Reciprocating Engine/Integral Compressor	List any control devices associated with this emission unit: N/A
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired reciprocating engine/integral compressor

Manufacturer: Cooper	Model number: GMXE-8	Serial number: 45998
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Construction date:	Installation date: 1964	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

660 hp

Maximum Hourly Throughput: 0.0054 MMscf/hr	Maximum Annual Throughput: 47.3 MMscf/yr	Maximum Operating Schedule: 8,760 hrs/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 660 hp	Type and Btu/hr rating of burners: 8,200 Btu/hp-hr 0.0054 MMscf/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline quality natural gas
 - Maximum hourly fuel usage = 0.0054 MMscf/hr
 - Maximum annual fuel usage = 47.3 MMscf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.37	19.12
Nitrogen Oxides (NO _x)	29.49	129.18
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	< 0.01	< 0.01
Particulate Matter (PM ₁₀)	0.05	0.24
Total Particulate Matter (TSP)	0.11	0.47
Sulfur Dioxide (SO ₂)	< 0.01	0.014
Volatile Organic Compounds (VOC)	3.30	14.47
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.042	0.184
Acrolein	0.042	0.184
Benzene	0.11	0.46
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.30	1.31
Hexane	< 0.01	0.011
Toluene	0.01	0.023
Xylene	< 0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). <ul style="list-style-type: none"> - CO, NO_x, and VOC emission rates based on emission statement submittals to WVDEP. - PM₁₀, PM_{2.5}, SO₂, and HAP emission factors from AP-42 Section 3.2, Table 3.2-1. 		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 7.1.1 and 7.1.3)
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 7.1.2 and 7.1.4)
40 CFR Part 63 Subpart ZZZZ – NESHAP monitoring requirements (TV 7.2.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP recordkeeping requirements (TV 7.4.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP reporting requirements (TV 7.5)

 X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first (TV 7.1.1)
40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 7.1.4)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 7.1.3 and 7.1.5)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring, recordkeeping, and reporting requirements (TV 7.2.1, 7.4.1, and 7.5)

Are you in compliance with all applicable requirements for this emission unit? X Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: RBR01	Emission unit name: RBR01 Dehydration Unit Reboiler	List any control devices associated with this emission unit: N/A
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

A natural gas fired boiler used to reheat glycol within the dehydration unit.

Manufacturer: NATCO	Model number: 450/750	Serial number: ED080284
Construction date: 2009	Installation date: 2009	Modification date(s): N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

1.0 MMBtu/hr

Maximum Hourly Throughput: 1000 cf/hr	Maximum Annual Throughput: 8.76 MMcf/yr	Maximum Operating Schedule: 8760 hrs/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 1.0 MMBtu/hr	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural gas

- Maximum hourly fuel usage = 1000 cf/hr
- Maximum annual fuel usage = 8.76 MMcf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.08	0.37
Nitrogen Oxides (NO _x)	0.10	0.44
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	<0.01	0.01
Particulate Matter (PM ₁₀)	<0.01	0.01
Total Particulate Matter (TSP)	<0.01	0.03
Sulfur Dioxide (SO ₂)	<0.01	<0.01
Volatile Organic Compounds (VOC)	0.01	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	<0.01	<0.01
Ethylbenzene	<0.01	<0.01
n-Hexane	<0.01	0.01
Toluene	<0.01	<0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.). <ul style="list-style-type: none"> - NO_x and CO emission factors from AP-42, Section 1.4, Natural Gas Combustion, Table 1.4-1, 7/98 - PM, PM₁₀, PM_{2.5}, SO₂, and VOC emission factors from AP-42, Section 1.4, Natural Gas Combustion, Table 1.4-2, 7/98 - HAP emission factors from AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4-3, 4, 7/98 		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 13 – Visible Emission Limits (TV 4.1.1, 45 CSR 2-3.1)

 X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 2-3.1 – Compliance with 4.1.1 is demonstrated by combusting natural gas.

Are you in compliance with all applicable requirements for this emission unit? X Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: DEHY01	Emission unit name: DEHY01 Dehydration Unit	List any control devices associated with this emission unit: F1
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Dehydration unit still column

Manufacturer: NATCO	Model number: 450/750	Serial number:
Construction date: 2009	Installation date: 2009	Modification date(s): N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

27.6 MMscf /day

Maximum Hourly Throughput: 27.6 MMscf /day	Maximum Annual Throughput: 10,074 MMscf/yr	Maximum Operating Schedule: 8760 hrs/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural gas

- Maximum hourly wet gas usage = 27.6 MMscf/day
- Maximum annual wet gas usage = 10,074 MMscf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.25	1.08
Nitrogen Oxides (NO _x)	0.05	0.20
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	< 0.01	< 0.01
Particulate Matter (PM ₁₀)	< 0.01	< 0.01
Total Particulate Matter (TSP)	< 0.01	< 0.01
Sulfur Dioxide (SO ₂)	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	4.86	21.28
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.12	0.52
Ethylbenzene	0.07	0.31
n-Hexane	0.08	0.33
Toluene	0.21	0.90
Xylenes	0.36	1.55
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>VOC and HAP emission rates for the dehydration unit were obtained from GRI GLYCalc V4.0 with a 95% destruction efficiency NO_x, CO, and VOC emission factors for the flare were obtained from Table 13.5-1 of AP-42</p>		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 13 – The maximum wet natural gas shall not exceed 27.6 MMcf/day (TV 5.1.9, R13-2792 5.1.1)
45 CSR 13 – Maximum Emission Limits (TV 5.1.10, R13-2792 5.1.2)
40 CFR 63.764(a) – Compliance with 40 CFR, Part 63, Subpart A, as listed in Table 2 of 40 CFR, Part 63, Subpart HH (TV 5.1.12)
40 CFR 63.760(f)(6) – Compliance with 40 CFR, Part 63, Subpart HH is required upon initial start-up (TV 5.1.13)
45 CSR 13 – 40 CFR 63 Subpart HH Benzene exemption requirements (TV 5.1.13, R13-2792 6.1.1)
45 CSR 13 – Compliance with TV 5.1.14 shall be achieved by meeting conditions a, b, and c of this condition (TV 5.1.14, R13-2792 6.1.2)

 X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 30-5.1.c - Compliance with TV 5.1.5 will be demonstrated by using GLYCalc V3 or higher and monitoring actual operating parameters (TV 5.2.1, R13-2792 5.3.3)
45 CSR 30-5.1(c) – SO₂ emissions shall be complied with by annual sampling of inlet natural gas stream (TV 5.2.3)
45 CSR 30-5.1(c) – H₂S emissions shall be complied with by annual sampling of inlet natural gas stream (TV 5.2.4)
45 CSR 13 – Wet Gas Throughput shall be monitored on a monthly basis (TV 5.2.6, R13-2792 5.2.2)
45 CSR 30-5.1.c – Wet Gas Sampling (TV 5.3.1)
40 CFR 63.772(b)(2) – Procedures for determining benzene emissions for exemption under 40 CFR 63.764(e)(1)
45 CSR 13 – Facility-wide HAP emission calculations shall be maintained to demonstrate compliance with TV 5.1.5 (TV 5.4.8, R13-2792 5.4.6)
45 CSR 13 – Wet gas throughput records shall be maintained to demonstrate compliance with TV 5.2.6 (TV 5.4.9, R13-2792 5.4.7)
45 CSR 13 – Records for TV conditions 5.4.3 through 5.4.10 shall be maintained and made available for inspection (TV 5.4.10, R13-2792 5.4.8)
45 CFR 63.774(d)(1)(ii) – Maintain records of the actual benzene emissions (TV 5.4.11)
45 CSR 30-5.1.c – Reporting of sampling results for TV 5.3.1 (TV 5.5.1)

Are you in compliance with all applicable requirements for this emission unit? X Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: EG01	Emission unit name: Emergency Generator	List any control devices associated with this emission unit: 3-way catalyst (NSCR)
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired emergency auxiliary generator

Manufacturer: Cummins	Model number: GTA 19 G2	Serial number: 25341415
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Construction date: 2009	Installation date: 2009	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
475 hp / 1800 rpm

Maximum Hourly Throughput: 4,200 cf/hr	Maximum Annual Throughput: 2.10 MMcf/yr	Maximum Operating Schedule: 500 hrs/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 475 hp / 1800 rpm	Type and Btu/hr rating of burners: 4.28 MMBtu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural gas

- Maximum hourly fuel usage = 4,200 cf/hr
- Maximum annual fuel usage = 2.10 MMcf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.19	1.05
Nitrogen Oxides (NO _x)	2.09	0.52
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	0.04	0.01
Particulate Matter (PM ₁₀)	0.04	0.01
Total Particulate Matter (TSP)	0.08	0.02
Sulfur Dioxide (SO ₂)	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	1.05	0.26
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.01	< 0.01
Acrolein	0.01	< 0.01
Benzene	< 0.01	< 0.01
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.09	0.02
Toluene	< 0.01	< 0.01
Xylene	< 0.01	< 0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <ul style="list-style-type: none"> - CO, NO_x, and VOC emission rates were calculated using manufacturer's technical data sheet. - All other emission rates were calculated using USEPA's AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, 7/00 		

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 13 – Emission limits (TV 6.1.1, G60-C014 5.1.2)
40 CFR Part 60 Subpart JJJJ – NSPS emission limits; for the life of the engine (TV 6.1.3 and 6.1.4, G60-C014 8.2.5 and 8.2.9)
40 CFR Part 60 Subpart JJJJ – NSPS emergency definition; limitation on maintenance and readiness testing to 100 hrs/yr (TV 6.1.6, G60-C014 8.4.4)
40 CFR Part 60 Subpart JJJJ – allowance for propane usage (TV 6.1.7, G60-C014 8.4.5)
45 CSR 13 – Operate and maintain according to manufacturer (TV 6.1.8, G60-C014 5.1.1)
45 CSR 13 – Maximum fuel consumption (TV 6.1.9; G60-C014 5.1.3)
45 CSR 13 – The control device shall be fitted with a closed-loop automatic air-fuel ratio controller that must provide a warning or indication to the operator and/or be interlocked with the engine ignition system (TV 6.1.10, G60-C014 5.1.4.a and c)
40 CFR Part 63 Subpart ZZZZ – RICE NESHAP as a new, emergency, spark ignition engine at an area source (40 CFR 63 Subpart ZZZZ)

 X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR Part 60 Subpart JJJJ – Purchase a certified engine to meet NSPS emission limits (TV 6.1.5, G60-C014 8.4.1)
45 CSR 13 – Regularly inspect, properly maintain and/or replace catalytic reduction devices. Maintain proper operation of the automatic air/fuel ratio controller or automatic feedback controller and follow operating and maintenance recommendations of the catalyst manufacturer (TV 6.2.1, G60-C014 5.2.1)
45 CSR 13 – Record hours of operation and fuel consumption on a monthly basis; keep records for 5 years (TV 6.4.1, G60-C014 5.4.1)
40 CFR Part 60 Subpart JJJJ – Comply with all applicable monitoring, reports, and recordkeeping requirements (TV 6.4.2, G60-C014 8.6.1)
40 CFR Part 60 Subpart JJJJ – Install non-resettable hour meter to demonstrate compliance with 7.1.4 (G60-C014 8.3.8)
40 CFR Part 63 Subpart ZZZZ – Compliance with NSPS Subpart JJJJ shows compliance with NESHAP Subpart ZZZZ

Are you in compliance with all applicable requirements for this emission unit? X Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

Attachment G

Air Pollution Control Device Form

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: F1	List all emission units associated with this control device. DEHY01, RBR01
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Manufacturer: NATCO	Model number: Q250	Installation date: 2009
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input checked="" type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC		95%
Benzene		95%
Ethylbenzene		95%
n-Hexane		95%
Toluene		95%
Xylene		95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

NATCO dehydration unit controlled flare
 10 MMBtu/hr non-assisted burner

Is this device subject to the CAM requirements of 40 C.F.R. 64? ☐ Yes ☒ No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** The dehy unit (DEHY01) is not subject to CAM since it is subject to NESHAP Subpart HH, which has provisions for compliance monitoring established after 1990. Per 64.2(b)(1)(i), “*emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act*” are exempt from CAM. CAM was established to build in provisions for how compliance would be demonstrated for emission limits if not adequately covered by a NSPS or NESHAP rule.

In addition, for VOC purposes, the dehy unit is not subject to CAM per 64.2(b)(1)(vi), which states “*emission limitations or standards for which a part 70 or 71 permit specified a continuous compliance determination method, as defined in 64.1*” is exempt from CAM. Since the R13 permit for the facility (R13-2792) specifies a “continuous compliance determination method” condition (e.g. continuously monitoring the flare using a thermocouple to detect the presence of a flame) and that R13 condition was rolled into the Title V permit, CAM does not apply.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

45 CSR 6-4.1 – Particulate Matter emission limit (TV 5.1.1)
45 CSR 6-4.3 – Flare operating requirements (TV 5.1.2, R13-2792 5.1.4)
45 CSR 6-4.5 – Incinerator operating requirements (TV 5.1.3)
45 CSR 6-4.6 – Incinerator odor prevention requirements (TV 5.1.4)
40 CFR 63.10(b)(3) – Facility shall maintain minor source of HAPs by complying with 3.1.10 (TV 5.1.5, R13-2792 5.1.3)
45 CSR 10-4.1 – Sulfur Dioxide emission limit (TV 5.1.6)
45 CSR 10-5.1 – Hydrogen Sulfide emission limit (TV 5.1.7)
45 CSR 13 – Operation and Maintenance of air pollution control equipment (TV 5.1.8, R13-2792 4.1.3)
45 CSR 13 – Flare design evaluation (TV 5.1.11, R13-2792 5.1.5)

Monitoring

45 CSR 30-5.1c – Compliance with 5.1.2 shall be demonstrated by conducting Monthly Visible Emission Observations (TV 5.2.2, R13-2792 5.3.1)
45 CSR 30-5.1.c – Compliance with 5.1.6 shall be demonstrated by annual inlet wet gas sampling (TV 5.2.3)
45 CSR 30-5.1.c – Compliance with 5.1.7 shall be demonstrated by annual inlet wet gas sampling (TV 5.2.4)
45 CSR 13 – Flare pilot flame monitoring (TV 5.2.5, R13-2792 5.2.1)

Testing

45 CSR 13 – Flare Compliance Assessment shall be conducted if required (TV 5.3.2, R13-2792 5.3.2)

Recordkeeping

45 CSR 30-5.1.c – Monitoring data shall be maintained to demonstrate compliance with 5.1.2.b, 5.1.2.i, and 5.2.2 (TV 5.4.1)
45 CSR 13 – Records of Malfunctions of air pollution control equipment shall be maintained (TV 5.4.2, R13-2792 4.1.4)
45 CSR 13 – Pilot Flame Absence records shall be maintained to demonstrate compliance with 5.1.2.c and 5.2.5 (TV 5.4.3, R13-2792 5.4.1)
45 CSR 13 – Flare design evaluation records shall be maintained to demonstrate compliance with 5.1.2 and 5.3.2 (TV 5.4.4, R13-2792 5.4.2)
45 CSR 13 – Testing records for 5.2.1 shall be maintained to demonstrate compliance with 5.1.2 and 5.2.1 (TV 5.4.5, 45 CSR 13, R13-2792, 5.4.3)
45 CSR 13 – Monitoring records for 5.2 and testing records for 5.3 shall be maintained (TV 5.4.6, R13-2792 5.4.4)
45 CSR 13 – Visible Emission Test records shall be maintained to demonstrate compliance with 5.1.2.b (TV 5.4.7, R13-2792 5.4.5)
45 CSR 13 – Records for conditions 5.4.3 through 5.4.10 shall be maintained and made available for inspection (TV 5.4.10, R13-2792 5.4.8)

Reporting

45 CSR 30-5.1.c – Reporting of Visible Emission Limit Exceedances (TV 5.5.1)
45 CSR 13 – Reporting of deviations of visible emissions requirement (TV 5.5.3, R13-2792 5.5.2)
45 CSR 13 – Report deviation from flare design and operation criteria (TV 5.5.4, R13-2792 5.5.3)